

# Innovative Flooring Solutions For Architectural Spaces

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# Flooring Products

- Finish materials that are applied over a floor structure:
- Ceramic tiles
- Marble
- Epoxy
- Terrazzo
- Gold
- Vinyl
- Rubber
- Hardwood
- Laminate
- Granite



# Flooring Solutions of Old:

- 'It was floored and wainscoted with Cedar of Lebanon and its walls and floor were overlaid with gold' (1 Kings 6:16,20,21,30)

# A Flooring Solution:

- Is a finish material that is applied over the floor structure, which meets a particular need(s) and must satisfy building code regulations.

# Flooring Solutions:

- Typically offered as a Product and Service combination
- Consists of the **sub-floor** and the floor covering
- **Sub-floors are critical to the success of the flooring solution**
- The sub-floor is the support for the flooring solutions

## Rooney Bicycle kick

Imagine some of the most iconic moments in history without the appropriate flooring solution

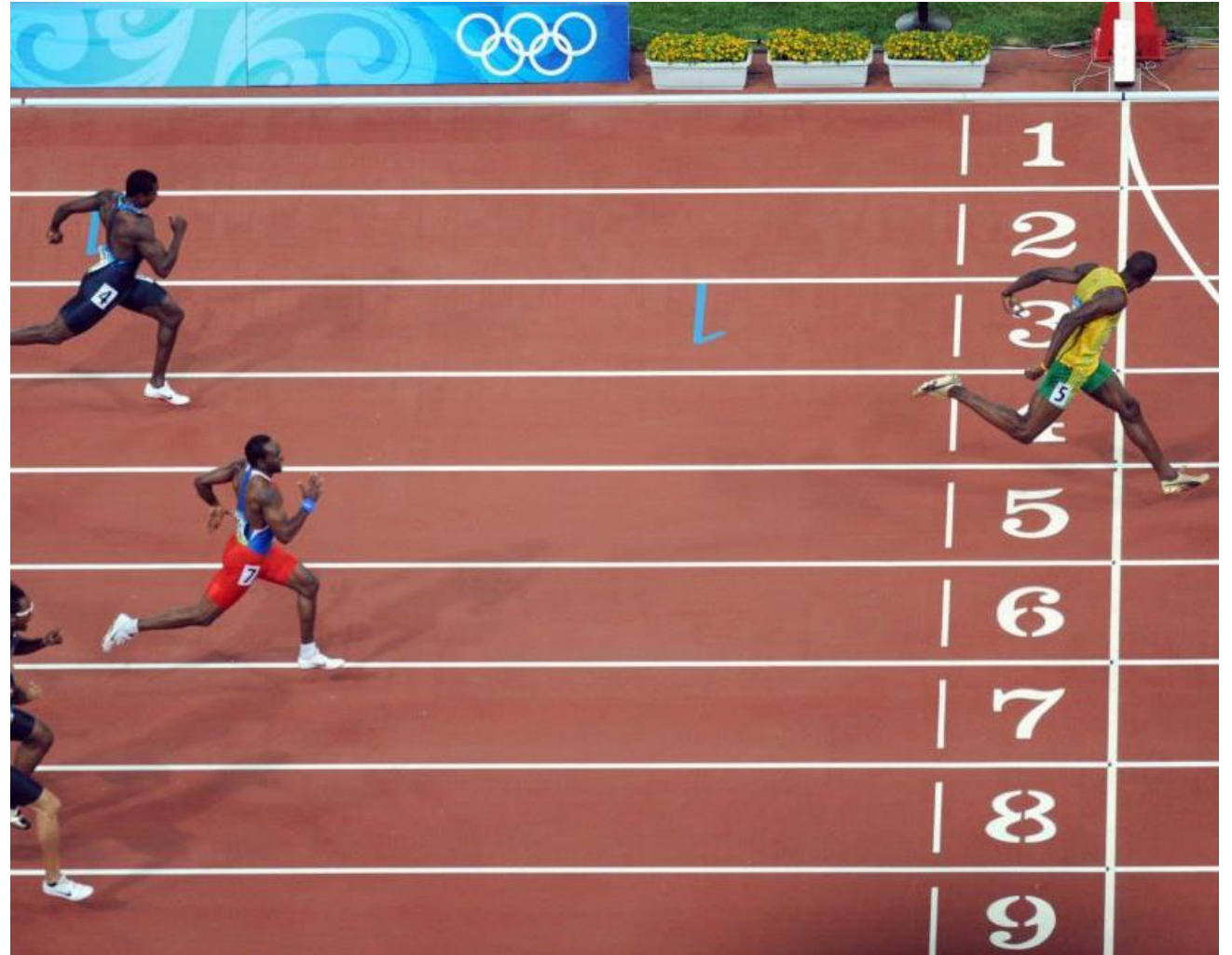


Picture Courtesy: Google images



# Usain Bolt Record

Imagine some of the most iconic moments in history without the appropriate flooring solution



Picture Courtesy: Google images

# Micheal Jackson Moonwalk

Imagine some of the most  
iconic moments in history  
without the appropriate  
flooring solution





# Technical Specifications and You

Specifications of materials can have real life effects and consequences

You need to ask questions.

Get detailed information on the following:

**Main application-** Your client might not be the end user

**Occasional application** – The end user might have other unspecified uses for the space

**Specialised Codes** – Does the space have additional codes and regulations governing its construction and



Picture Courtesy: Engineering.com

# Innovative Flooring Solutions

Materials, Challenges and Code

# Integrated Aisle and Floor Lighting

## Technical Requirements

Wayfinding during scheduled performances or emergencies.

## Challenge:

Lighting must be durable, able to withstand rough treatment and perform during emergencies.

## Solution:

LED and Cold Cathode lighting can be used to create colour effects

OLED films to create photo luminescent flooring



Picture Courtesy: Gradus

# Integrated Aisle and Floor Lighting

## Technical Requirements

Branding and information management

### Challenge:

Lighting must be durable, able to withstand rough treatment and perform during emergencies.

### Solution:

Computer controlled LED Carpet and Vinyl

Centrally programmable messages



Picture Courtesy: Phillips Lighting



# Wet Play Areas

## Technical Requirements

Extreme Slip resistance

Comfort, Protection and Safety

## Challenge:

Make a comfortable, safe floor in wet play areas that is easy to maintain

## Solution:

EVA rubber to ensure slip resistance up to 40 degrees when wet

Antimicrobial treatment

Stain resistance to chemicals and food



Picture Courtesy: Lifefloor

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Picture Courtesy: Lifefloor



# Sustainable Floors

## Technical Requirements

Power for Street Furniture in urban areas

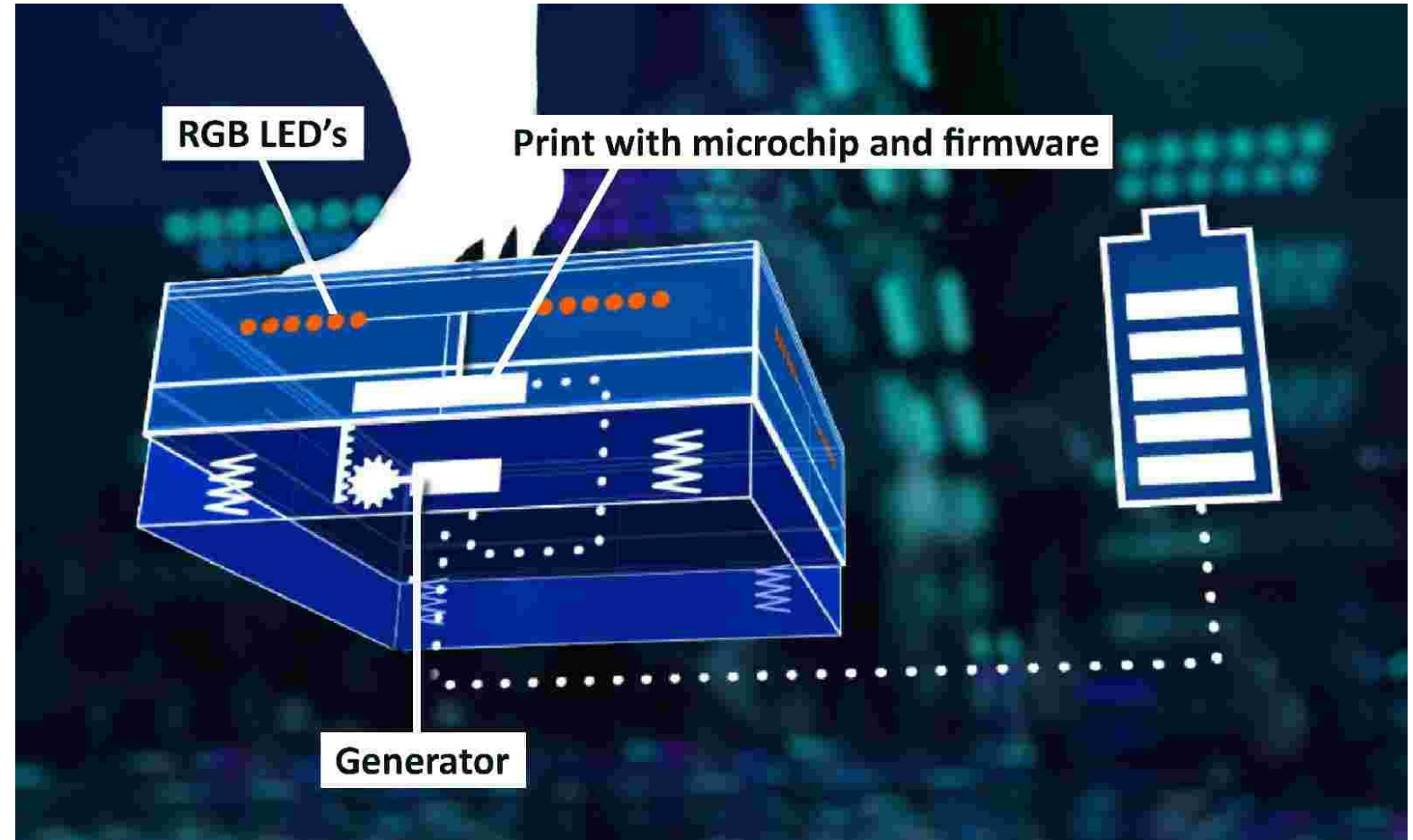
## Challenge:

Shade makes Solar and Wind difficult in urban areas

## Solution:

Conversion of Kinetic energy from road users into electricity

System generates 7 Watts of power/step i.e. 1 LED streetlamp for 30 seconds



Picture Courtesy: Engineering.com

# Sustainability: Kinetic Paver Tiles



System generates 7 Watts of power/step i.e. 1 LED streetlamp for 30 seconds

Picture Courtesy: Pavegen

# Temporary Rapid Deployment

## Technical Requirements

Lightweight, rapid installation, reusable, durable

## Challenge:

Rapid deployment of durable, light weight flooring for temporary installations like forward operating bases, stadia during events , helicopter landing pads, temporary roads.

## Solution:

Modular portable heavy duty loading bearing panels.

Interlocking system ensures rapid installation and disassembly.



Picture Courtesy: Portafloor



# Temporary Rapid Deployment



For temporary installations like forward operating bases, stadia during events , helicopter landing pads, temporary roads.

Picture Courtesy: Portafloor

# Healthcare

## Technical Requirements

Inhibits growth and spread of germs. Does not damage dropped hospital equipment. Aesthetically pleasing.

## Challenge:

Create an antibacterial environment that does not require shut down maintenance.

## Solution:

Surface coating of products with antibacterial and antifungal solutions.

Inbuilt wax surfaces

Curved corners and coving

Seamless flooring applications

Vinyl and Epoxy are most commonly used



Picture Courtesy: Gerflor

# Intense Traffic Flooring

## Technical Requirements

Comfortable, rapid deployment,  
easily maintained, Safety

Able to withstand forklifts,  
thousands of pedestrian traffic  
and trolleys

## Challenge:

A durable, low maintenance,  
water proof floor protects  
merchandise and is not noisy.

## Solution:

Modular interlocking panels with  
internal mesh grid for strength.

Vinyl with Evercare coating.



**GTI MAX decor**  
solution to breaking bottles



# ESD Areas

## Technical Requirements

Prevent Electro static discharge that can interfere with sensitive operations and equipment

### Challenge:

Low Body Voltage Generation

### Solution:

Carbon infused finish materials laid on earthed copper strip

- Dissipative  $R < 10^8$   
Conductive  $R < 10^6$



Picture Courtesy: Gerflor

# ESD Areas

## Technical Requirements

Prevent Electro static discharge that can interfere with sensitive operations and equipment

### Challenge:

Safe Electrical Discharge Elimination

### Solution:

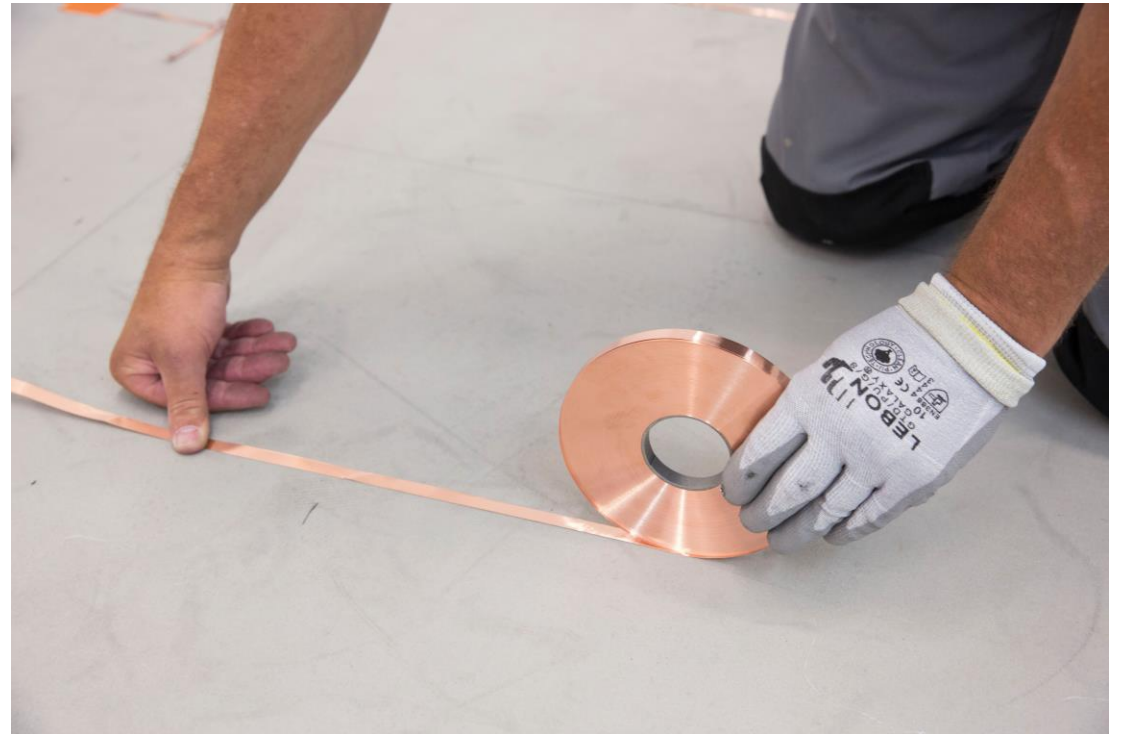
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Picture Courtesy: Gerflor

# ESD Areas



Picture Courtesy: Gerflor



# Sports

## Technical Requirements

Safety and Protection of athletes and users

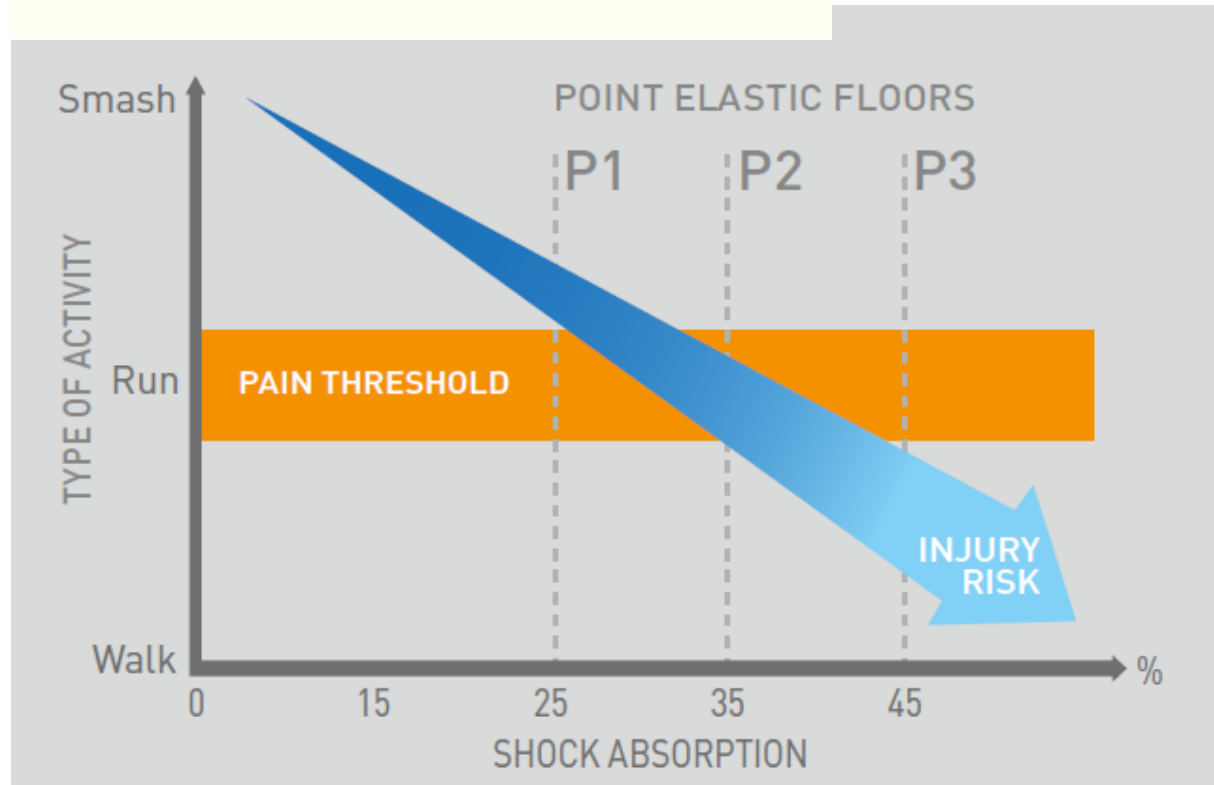
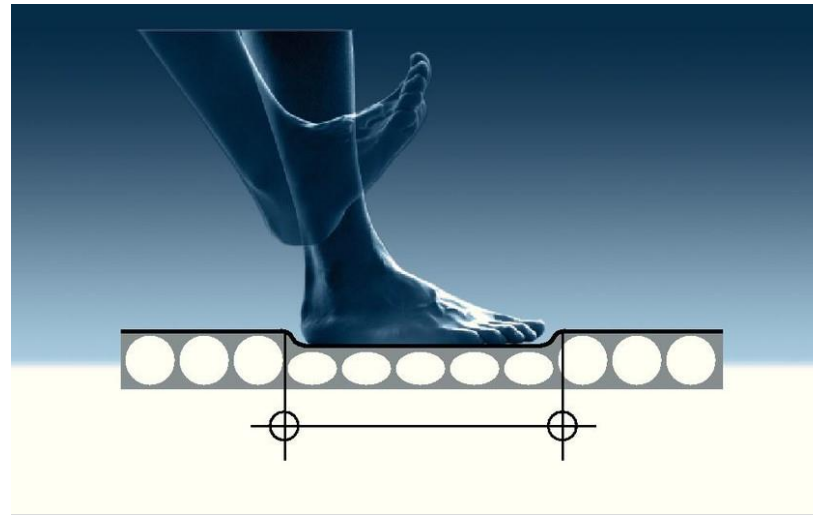
### Challenge:

Durable yet comfortable surface with grip yet does not give 'rug burn'.

Protection from injury during use and Safety in case of falls

### Solution:

Mix of Point and Area Elastic Materials to create Olympic Standard Solutions



Picture Courtesy: Gerflor

# Sports

## Technical Requirements

Certified Sports Floor installed in basement conditions

## Challenge:

Adhesion to areas prone to damp or highly humid conditions.

## Solution:

Create a vinyl sports floor with revolutionary backing technology that eases moisture away from the sports surface.



Picture Courtesy: Gerflor

# Sports



Picture Courtesy: Gerflor



# Raised Access Flooring

## Technical Requirements

Durable, Load bearing and Flexible

## Challenge:

Retrofit systems to accommodate advancing technology and keep pace with ever evolving advancements.

## Solution:

Raised solutions comprising panels, stringers and pedestals

Most Common Panel Types:

- Cement infilled
- Calcium Sulphate
- Wood



Picture Courtesy: Xiangli/Gerflor

# You can mix in a single space



Picture Courtesy: Gerflor

# Do not be Boring



Picture Courtesy: Gerflor



# Techno-Specific is not boring



Picture Courtesy: Gerflor

# Techno-Specific can be Aesthetically Pleasing



Picture Courtesy: Gerflor

Thank you